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ABSTRACT

Designed to serve as a guide to resources on artificial intelligence (AI) and expert systems, this Library of Congress bulletin is divided into 18 sections that contain lists of books, journal articles, periodicals, associations, and other sources of information. A brief statement of the scope of the guide introduces the sections, which are listed here with the number of citations included for each: (1) introductory texts (2); (2) subject headings used by the Library of Congress under which books on AI can be located in most catalogs (24); (3) background texts (12); (4) basic texts (10); (5) additional texts (14); (6) collected works (7); (7) related texts (13); (8) handbooks, encyclopedias, and dictionaries (8); (9) bibliographies (3); (10) state-of-the-art reviews and conference proceedings (17); (11) government publications (5); (12) abstracting and indexing services that index relevant journal articles (11); (13) journals that often contain articles relevant to AI (12); (14) representative journal articles (19); (15) subject headings for reports and other types of literature indexed in Scientific and Technical Aerospace Reports and the U.S. Government Reports & Announcements Index; (16) selected technical reports from the National Technical Information Service (NTIS) (10); (17) selected materials available in the Library of Congress Science Reading Room (7); and (18) additional sources of information--e.g., associations and university departments (12). (JB)

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ARTIFICIAL INTELLIGENCE
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SCOPE: Artificial intelligence is an emerging technology. This technology is concerned with understanding the nature of intelligent action and constructing computer systems capable of reason by which machines can learn functions normally associated with human intelligence. This includes problem solving, perception, learning, symbolic activity, creativity, language and related processes. The interdisciplinary nature of artificial intelligence is reflected by its appearance in the literature of the engineering sciences, mathematics, linguistics, psychology and the biological sciences. The interaction between automatic control and living organisms is not included in this guide.

Related titles in the LC Science Tracer Bullet series include Industrial Robots (TB 80-19), CAD/CAM (Computer Aided Design/Computer Aided Manufacture) (TB 85-7) and Brain and Behavior (TB 79-3). Not meant to be a comprehensive bibliography, this Tracer Bullet is designed--as the name of the series implies--to put the reader "on target."

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Gevarter, William B. Artificial intelligence, expert systems, computer vision, and natural language processing. Park Ridge, N.J., Noyes Publications, c1984. 226 p. Q335.G48 1984

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SUBJECT HEADINGS used by the Library of Congress, under which books on artificial intelligence can be located in most card, book, and online catalogs, include the following:

ARTIFICIAL INTELLIGENCE (Highly relevant)
EXPERT SYSTEMS (COMPUTER SCIENCE) (Highly relevant)
HEURISTIC PROGRAMMING (Highly relevant)
AUTOMATIC SPEECH RECOGNITION (Relevant)
COGNITION (Relevant)
FUZZY SETS (Relevant)
FUZZY SYSTEMS (Relevant)
LINGUISTICS--DATA PROCESSING (Relevant)
MACHINE LEARNING (Relevant)
MACHINE TRANSLATING (Relevant)
OPTICAL PATTERN RECOGNITION (Relevant)

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 CYBERNETICS (Related)
 ROBOTICS (Related)
 ROBOTS (Related)
 ROBOTS, INDUSTRIAL (Related)
 INFORMATION THEORY (More general)
 LOGIC, SYMBOLIC AND MATHEMATICAL (More general)

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 See: Artificial Intelligence
 Expert Systems

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 Artificial Intelligence
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 See: Computer Programming--Algorithms
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*Note: Consult reference librarian for location of abstracting and indexing services in the Science Reading Room.

International Aerospace Abstracts (1961-) TL500.I57*

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 Computer Vision
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ADDITIONAL SOURCES OF INFORMATION

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